

REMARKS

By the above actions, claims 1 and 2 have been cancelled and replaced by new independent claim 10, and claim 7 has been amended. Furthermore, claim 9 has been rewritten in independent form. It is also noted that an Information Disclosure Statement is being filed in conjunction with this response. In view of these actions and the following remarks, reconsideration of this application is requested.

At the outset, the Examiner's allowance of claims 3-5 and indication of allowable subject matter with respect to claim 9 is appreciated. Thus, claim 9 has been placed in allowable independent form, so that a formal indication of allowance is requested.

With regard to the Examiner's requirement for a new declaration because the declaration filed references the PCT number and not the U.S. application, this requirement is totally improper and inconsistent with Office practice. When a PCT application enters the U.S. National Phase, there is no U.S. application number and it is standard practice to reference the PCT application number when filing a declaration at that time and such is sufficient to meet the requirement of 37 CFR § 1.63(b)(1) and 37 CFR § 497(b)(1) to "[i]dentify the application to which it is directed." Neither the rules nor related MPEP § 1893.01(e) require use of the U.S. application number on a declaration as a means to meet the requirements of 37 CFR § 1.63(b)(1) and 37 CFR § 497(b)(1), and it is suggested that the Examiner contact the PCT division of the USPTO to confirm the foregoing. Furthermore, since the inventor has left the employment of the assignee and his whereabouts are unknown, this improper requirement places an unnecessary burden upon the assignee. Therefore, withdrawal of the requirement for a new declaration is in order and is requested.

As for the Examiner's comment concerning claiming of priority, his attention is directed to the second page of the Application Data Sheet filed on entering of the U.S. National Phase in April, 2005, where a claim of priority can be found. Thus, no further action is required in this respect.

The abstract has been objected to by the Examiner and the deficiencies thereof have been corrected in the new abstract provided herewith.

Claims 1, 2 and 6-8 have been rejected under 35 USC § 102 based upon the Bennet '815 patent. To the extent that this rejection relates to new claim 10 that has replaced claims 1 and 2, it should be withdrawn for the following reasons.

First, only the audio aspect of Bennet's disclosure for obtaining "projections of spectral surfaces" (col.1, lines 27-30) relates to the present invention. The first part of the rejection relates to the types of signal that may be found in a heart sound (first and second) and it is not applicant's intention to try to obtain protection for merely identifying those signals, but rather relates to the manner and means by which heart sounds are used to obtain information about the condition of a patient's heart..

The signal processing identified by the Examiner with reference to column 5 of Benne '815 pertains to normal filtering and A/D conversion principles used in any modern audio application. The Examiner has expressed the view that the use of A-, B-, and C- weighting filters will eliminate the contribution of the first and second heart sounds. However, these filters only make sense when considering the audio-visual comparison that Bennet performs (col. 7, lines 29-34), and Bennet only uses these filters because they are well-specified ("have the virtue of being defined by the American National Standards Institute (ANSI)"; col. 7, lines 37-48). However, Bennet's use relates to the visual display, which has no bearing on the audio technique of the present invention, and the elimination performed by Bennet is not the kind of elimination that is performed by the invention.

The process diagram in Fig. 1 of the application shows the steps performed according to the present invention. The advantage of the present invention is that, by "detecting first and second heart sounds and placing them correctly on a time axis," it is possible to eliminate them, not by filtering, but by not considering their contribution to the signal energy ("extracting the first and second heart sounds by classification according to energy levels"). Furthermore, it is also determined which one is the S1 and which one is the S2. This is not what is taught in the Bennet '815 patent

With respect to the rejection of claims 7 and 8, it is based on the fact that Bennet has a stereophonic output. However, he obtains a stereophonic output by using a stereophonic input, i.e., he needs two inputs at all times: microphones 11, 12 (col. 4, line 5), having two completely separate signal processing channels which extend through his apparatus (Fig. 3 and Fig. 5) as described at col. 4, line 41ff. The present invention has a "single-channel

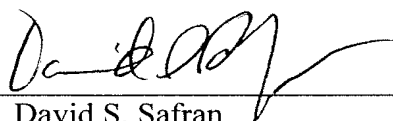
input" (amended claim 7) and performs a separation of the timing of the sound so that a spatial ("stereophonic") signal appears in the headphones. The elimination of the contributions of the S1 and the S2 sounds, which would overload the hearing mechanism, returns here to make the sound more structured.

The above differences between the present invention and the Bennet '815 patent are now more clearly reflected in the language of the claims as now presented, it based on the foregoing it should be clear to the Examiner that the present invention is neither anticipated nor rendered obvious by the disclosure of this reference. Therefore, withdrawal of the rejection based thereon is in order and is requested.

The references that have been cited but not applied by the Examiner have been taken into consideration. However, since these references were not found to be relevant enough by the Examiner to apply against the original claims, no detailed comments thereon are believed to be warranted at this time.

While this application should now be in condition for allowance, in the event that any issues should remain after consideration of this response which could be addressed through discussions with the undersigned, then the Examiner is requested to contact the undersigned by telephone for that purpose.

Respectfully submitted,

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